

## CLAIMS

What is Claimed is:

1. A method of managing a testing task, said method comprising:  
receiving a plurality of test cases to run, each test case including a  
5 plurality of requirements for running said respective test case;  
receiving an identification of a group of available test systems on  
which to run said test cases;  
for each test case, determining a list of applicable test systems from  
said group that satisfy said requirements of said respective test case;  
10 automatically selecting and starting test cases to run based on each  
respective list and said available test systems so that as many test cases as  
possible are run in parallel; and  
when any test case finishes running and releases a test system to  
said group of available test systems, automatically selecting and starting an  
15 additional test case to run if possible based on said respective list and said  
available test systems.
2. The method as recited in Claim 1 wherein said receiving said  
identification of said group of available test systems includes:  
20 for each available test system, determining a plurality of attributes of  
said respective available test system.
3. The method as recited in Claim 1 further comprising:  
keeping track of a status of each test case.  
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4. The method as recited in Claim 1 further comprising:  
completing said testing task when test cases that could have run on  
said available test systems have finished running.
- 30 5. The method as recited in Claim 4 further comprising:  
displaying results of said test cases.

6. The method as recited in Claim 1 wherein said automatically selecting and starting test cases to run includes:

for each test case, creating a real test system name file.

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7. The method as recited in Claim 1 further comprising:  
initializing a work directory for each test case.

8. A computer-readable medium comprising computer-readable  
10 instructions stored therein for performing a method of managing a testing task, said method comprising:

receiving a plurality of test cases to run, each test case including a plurality of requirements for running said respective test case;

15 receiving an identification of a group of available test systems on which to run said test cases;

for each test case, determining a list of applicable test systems from said group that satisfy said requirements of said respective test case;

20 automatically selecting and starting test cases to run based on each respective list and said available test systems so that as many test cases as possible are run in parallel; and

when any test case finishes running and releases a test system to said group of available test systems, automatically selecting and starting an additional test case to run if possible based on said respective list and said available test systems.

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9. The computer-readable medium as recited in Claim 8 wherein said receiving said identification of said group of available test systems includes:

30 for each available test system, determining a plurality of attributes of said respective available test system.

10. The computer-readable medium as recited in Claim 8 wherein said method further comprises:

keeping track of a status of each test case.

5 11. The computer-readable medium as recited in Claim 8 wherein said method further comprises:

completing said testing task when test cases that could have run on said available test systems have finished running.

10 12. The computer-readable medium as recited in Claim 11 wherein said method further comprises:

displaying results of said test cases.

15 13. The computer-readable medium as recited in Claim 8 wherein said automatically selecting and starting test cases to run includes:

for each test case, creating a real test system name file.

14. The computer-readable medium as recited in Claim 8 wherein said method further comprises:

20 initializing a work directory for each test case.

15. A system comprising: /

a plurality of available test systems;

a controller for controlling said available test systems; and

25 a test driver for receiving a plurality of test cases, each test case including a plurality of requirements for running said respective test case, wherein said test driver matches said available test systems with said test cases based on said requirements, and wherein said test driver selects and starts test cases to run so that as many test cases as possible are run in  
30 parallel based on said available test systems and said requirements.

16. The system as recited in Claim 15 wherein when any test case finishes running and releases a test system to said group of available test systems, said test driver selects and starts an additional test case to run if possible based on said respective requirements and said available test systems.

17. The system as recited in Claim 15 wherein said test driver determines a plurality of attributes of each available test system.

18. The system as recited in Claim 15 wherein said test driver keeps track of a status of each test case.

19. The system as recited in Claim 15 wherein said test driver finishes executing when test cases that could have run on said available test systems have finished running.

20. The system as recited in Claim 19 wherein said test driver displays results of said test cases.

21. The system as recited in Claim 15 wherein said test driver creates a real test system name file for each test case.

22. The system as recited in Claim 15 wherein said test driver initializes a work directory for each test case.